



COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF CONSERVATION  
AND ECONOMIC DEVELOPMENT  
DIVISION OF MINERAL RESOURCES

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BIBLIOGRAPHY OF VIRGINIA  
GEOLOGY AND MINERAL  
RESOURCES—1950-1959

F. B. HOFFER

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INFORMATION CIRCULAR 19

VIRGINIA DIVISION OF MINERAL RESOURCES

James L. Calver  
Commissioner of Mineral Resources and State Geologist

CHARLOTTESVILLE, VIRGINIA

1972



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## **BIBLIOGRAPHY OF VIRGINIA GEOLOGY AND MINERAL RESOURCES—1950-1959**

By

F. B. HOFFER

### **INTRODUCTION**

Two bibliographies dealing with Virginia geology and mineral resources have been previously published:

- (1) Annotated geological bibliography of Virginia: Charlottesville, Alderman Library; Richmond, Dietz Press, 726 p., 1942, by J. K. Roberts;
- (2) Bibliography of Virginia geology and mineral resources—1941-1949; Virginia Division of Mineral Resources Information Circular 14, 58 p., 1968, by F. B. Hoffer.

The present bibliography is patterned after the Bibliography of North American Geology, which is published annually by the United States Geological Survey. It lists the literature on the geology and mineral resources released from 1950 through 1959, plus some omissions from earlier bibliographies. Readers are encouraged to notify the Virginia Division of Mineral Resources of any omissions and errors in this bibliography so that corrections may be included in later supplements. Theses from colleges and universities in the United States and open-file reports which include data pertaining to the Commonwealth of Virginia are listed.

Where a report deals with more than three counties, it is entered in the index under Virginia or a subdivision of the Commonwealth, or under one of the physiographic provinces. Abbreviations in the citations are restricted to those commonly known or used in the United States Geological Survey Bibliography of North America.

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 August 27, 1833, Virginia, central: MacCarthy, G. R., 2.  
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**ECHINOIDEA**

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 Cenozoic, description: Cooke, C. W., 2.

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 Terrestrial, Brallier shale barrens, plants endemic to them: Platt, R. B.

**EDUCATION**

General  
 V.P.I., geology program: Cooper, B. N., 14.  
 V.P.I., paleontology: Moore, W. E., 4.

**ELECTRICAL SURVEY**

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 Stony Point area: Tazelaar, J. F., 1.  
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 Foundation  
 Arlington County  
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- Harbors**  
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- Highways**  
Concrete aggregate reaction: Melville, P. L.  
Construction materials survey: Meador, J. P., 1.  
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Geologists role: Parrott, W. T., 16.  
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Features of physiographic provinces: Laurence, R. A., 2.
- Materials properties**  
Coal, mine roof shales, Virginia, southwestern: Meyerton, C. T.  
Limestones, Cambrian-Ordovician, highway use, Appalachian Valley, Piedmont: Sherwood, W. C., 2.
- Shorelines**  
Virginia Beach, erosion control studies, U. S. Army Corps of Engineers, 1.  
Virginia Beach, beach stabilization: Watts, G. M.
- EROSION**
- Augusta County  
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- ESSEX COUNTY**
- Hydrogeology  
Ground water resources: Sinnott, A., 8.
- FAIRFAX COUNTY**
- Areal geology  
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- Economic geology  
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- Engineering geology  
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- Geochemistry  
Diabase, granophyre sequence, uranium-thorium: Gottfried, D., 1, 2.
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- Maps, geologic  
District of Columbia and vicinity: Carr, M. E. S., 1.  
Fairfax and Seneca quadrangles: Benson, A. P.
- Mineralogy  
Zeolites, Centerville area, rare assemblage: Parrott, W. T., 13.
- Petrology  
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- Diabase W-1, analyses, investigations: Fairbairn, H. W., 1, 2.  
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- FAULTS**
- General  
Lee County, Jonesville district: Miller, R. L., 3.  
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Montgomery County, Pilot Mountain area: Dietrich, R. V., 5.  
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Piedmont, rift structure, Triassic basin: Bain, G. W.
- Klippen  
Rockingham County, Harrisonburg quadrangle: Brent, W. B., 1.
- Low angle  
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- Major  
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- Normal  
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 Nokesville quadrangle: Bain, G. L.  
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 Bedford area, occurrence, uses: Oilways, 2.  
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 Willis area, halloysite, salt retention: Thomas, G. W.  
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 Heavy minerals, Little River sediments: Mangold, C. R., Jr.  
 Stratigraphy  
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 Western, idealized section: Dietrich, R. V., 3.  
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 Construction materials, slate, uses, Bremo Bluff: Oilways, 1.  
 Mineralogy  
 Hardware River sediments, bedrock: Forkgen, P. E.  
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 Appalachians: Stone, G. W.  
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Major  
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Paragonite, trigonal, analyses, southeastern: Dietrich, R. V., 8.

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Economic geology  
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Areal geology  
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Trilobita, Cambrian: Wilson, J. L., 1, 2.  
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Winchester area, upper Cambrian formations: Wilson, J. L., 2.  
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Southern, data: Skeels, D. C.

**Methods**

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Coal concentration in, Tazewell County:  
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East River Mountain area: Chauvin, E.  
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Iron, Silurian, Rose Hill Formation, East  
River Mountain area, possibilities:  
Chauvin, E. W.

Limestone, high calcium, Hoges Store  
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**Petrology**

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Virginia  
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Resources, quality: Sinnott, A.  
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Albemarle County  
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Economic geology  
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General  
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 Clifton Forge district: Lesure, F. G.

- Albemarle County**  
Stony Point area, survey: Tazelaar, J. F., 1.
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Blue Ridge, tectonics, Harrisburg to Asheville: Cloos, E., 1.

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Northern, ground cf. airborne: Kuehn, H. E.

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Airborne: Johnson, R. W., Jr., 1.

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Continental margin: Drake, C. L.

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Fairfax County, Centerville area, Sr and Rb contents: Herzog, L. F., II.

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Giles County, Pig Hole Cave: Murray, J. W., 3.

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Wise County, properties: Pharr, R. F.

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Radford area: Hergenroder, J. D.

Economic geology  
Construction materials, from dolomite, Radford Limestone Quarry: McCutcheon, F. S.

Maps, geologic  
Radford area: Hergenroder, J. D.

### PYRITE

Virginia, southwest  
Gossan Lead District, genesis, production: Stose, A. I. J.

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Accomack County  
Correlation, Pleistocene: Sinnott, A., 9.  
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Northampton County  
Correlation, Pleistocene: Sinnott, A., 9.  
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Virginia  
Deciduous forest development: Braun, E. L., 1.  
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Clinton Jackson deposit, possibilities: Bell, J. E.

Virginia, southwest  
Crystalline, resources, genesis, properties: Mertie, J. B., Jr., 6.

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Chesapeake Bay, bottom: Jaffee, G.  
Sulfide deposit  
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Appalachians  
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Bealeton area, Triassic, correlation to geology, airborne: Guillou, R. B., 1.

Goochland County  
Airborne, correlation with geology: Guillou, R. B., 2.

Virginia  
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Montgomery County  
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Walker Mountain, subsurface streams: Lowry, E. J., 2.

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Meanders  
Intrenched, Shenandoah River, North Fork, Shenandoah County: Hack, J. T., 5.

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Stream relation to erosion, Virginia: Allen, R. M., 1.

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Areal geology  
Tinker Mountain-Fincastle area: Nichol, R. F.

Economic geology  
Limestone, Lone Star cement plant: Trauffer, W. E., 1.

Geophysical surveys  
Resistivity, magnetic, Bush-Hutchin ilmenite deposit: Sears, C. E., Jr., 2.

Hydrogeology  
Ground water, Roanoke-Salem district, public and industrial supplies: Latta, B. F.

Maps, geologic  
Roanoke quadrangle: Andrews, L. E., Jr.  
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Cephalopoda, Chepultepec-Stonehenge formations, transition unit, basal, Roanoke area: Unklesbay, A. G.  
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Cambrian, Poor Mountain area: Shufflebarger, T. E., Jr.  
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## Structural Geology

Poor Mountain area: Shufflebarger, T. E., Jr.  
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## Areal geology

Craigsville area: Prutsman, W. J.  
Goshen Pass area: Rothenberger, J. A.  
Moffat Creek area: Rector, W. K.  
Vesuvius district: Moore, R. E., Jr.

## Economic geology

Beryllium, possibilities, Irish Creek district: Warner, L. A.

Manganese, mining, production, South River mine: Spurgeon, R. C.

Tin, Irish Creek district: Glass, J. J.

## Geomorphology

James River, Sallings Ridge area: Bloomer, R. O., 3.

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Floods, peak discharge, central: Tice, R. H., 1.

## Maps, geologic

Craigsville area: Prutzman, W. J.  
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Calcite, twinned, crystals, Lone Jack Quarry: Laswell, T. J., 2.

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- Limestone, lithium equivalents, recovery, Sunbright plant: Trauffer, W. E., 2.
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- Maps, geologic**
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- Areal geology
  - Edinburg Quadrangle: Young, R. S., 2.
  - Mount Jackson Quadrangle: Thornton, C. P.
- Economic geology
  - Timberville district: Herbert, P., Jr., 1.
- Geomorphology
  - Shenandoah River, North Fork, elongated meanders: Fisher, C. C., 2.
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- Maps, geologic
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Shenandoah River, North Fork, elongated  
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Economic geology  
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Geomorphology  
Caves, popular account: Black, R. E.  
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Mineralogy  
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Coopers, B. N., 10, 11.

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Changes  
Accomack County, Assateague Island,  
southern: Rude, G. T.  
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Richards, H. G., 4.  
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Piedmont  
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Kessler, D. W.

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son, T. M.  
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man, W. J.  
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Economic geology  
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area: Sears, C. E., Jr., 4.  
Maps, geologic  
Rich Valley area: Webb, F., Jr., 2.  
Mineralogy  
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stone, Saltville area: Whittington,  
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limestones: Webb, F., Jr., 1.  
Structural geology  
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Northern, Tatum silt loam: Rich, C. I.,  
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Geochemistry, weathering, parent rock:  
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## Hydrogeology

Franklin area, ground water resources:  
Sinnott, A., 1.

**SPOTSYLVANIA COUNTY**

## Areal geology

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## Hydrogeology

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## Maps, geologic

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**STAFFORD COUNTY**

## Areal geology

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## Economic geology

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## Maps, geologic

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## Paleontology

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## Carroll County

Great Gossan Lead, microscopic study: Corriveau, M. P., 2.

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## Amherst County

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## Blue Ridge

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**TAZEWELL COUNTY**

## Economic geology

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- Mississippian, Upper: Wilpolt, R. H., 2.
- Mississippian, measured sections: Wilpolt, R. H., 1.
- Mississippian, St. Louis limestone correlative: Sanders, J. E.
- Mississippian, correlation with West Virginia Formations: Wells, D.
- Ordovician, Middle, Egglesston Formation, correlation: Fitzgerald, H. V., Jr.
- Ordovician, Chepultepec, Longview formations, limestone beds: Moore, W. E., 1.
- Paleozoic, early structures: Moore, W. E., 3.
- Paleozoic, lithology, effects on geomorphology, Clinch Mountain area: Miller, V. C.
- Pennsylvanian, correlations: Moore, R. C.
- Pennsylvanian, southwestern coal fields: Wanless, H. R., 1.
- Pennsylvanian, coal beds, Appalachian Basin: Wanless, H. R., 7.
- Pennsylvanian, Indian Bluff and Graves Gap Group, Tennessee related: Wilson, C. W., Jr.
- Pennsylvanian, isopach studies: Wanless, H. R., 3.
- Pennsylvanian, lithologic variation, Wise Formation: Wanless, H. R., 2.
- Pennsylvanian, Pottsville strata, coal field: Dapples, E. C., 1; Mitchum, R. M., Jr.
- Structural geology  
Coal areas: Brown, A.
- Cumberland overthrust block, shear zone in Devonian, deep well records: Young, D. M., 3.
- Dolomitic limestones, prelithification structures: Lowry, W. D., 4.
- Pine Mountain fault, thrust or slide: Taylor, M. H., Jr.
- Paleozoic, early: Moore, W. E., 3.
- VIRGINIA-WESTERN**
- Areal geology  
James River district, west of the Blue Ridge: Edmundson, R. S., 5.
- Economic geology  
Limestone-dolomite, industrial, James River district, west of Blue Ridge: Edmundson, R. S., 5.
- Barite resources: Brobst, D. A.
- Iron, coal, fluxstone, resources: Cooper, B. N., 15.
- Iron, Oriskany deposits, exploration, central: Morrison, G. A.
- Iron ores, Paleozoic, genesis: Earle, R. B.
- Iron, resources, bibliography: Carr, M. E. S., 2.
- Sand, silica, reserves: Lowry, W. D., 3.
- Geomorphology  
Erosion surfaces, residual sands: Lowry, W. D., 2.
- Geophysical survey  
Aeromagnetic, anomalies, central: Johnson, R. W., Jr., 4.
- Maps, geologic  
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- Mineralogy  
Bentonite, occurrence: Ross, C. S.
- Paleontology  
Brachiopoda, Terebratuloid, Silurian, Devonian: Cloud, P. E., Jr.
- Devonian, Middle, paleoecology: Cooper, G. A., 5.
- Plants, Pennsylvanian: Lesquereux, L.
- Trilobita, Phacopid: Delo, D. M.
- Petrology  
Dike rocks, central: Johnson, R. W., Jr., 3.
- Max Meadows fault breccia: Cooper, B. N., 17.
- Paleozoic quartzose sandstone, cementation: Lowry, W. D., 10.
- Silica sand: Lowry, W. D., 3.
- Stratigraphy  
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Devonian, upper, lithofacies, map: Sutton, R. G.  
 Mississippian, correlation: Weller, J. M.  
 Ordovician, age relations: Cooper, B. N., 2.  
 Ordovician, folding implications: Lowry, W. D., 7.  
**Structural geology**  
 Central, dike swarms: Johnson, R. W., Jr.  
 Folding implications, Ordovician rocks: Lowry, W. D., 7.  
 Pulaski and Max Meadows faults, tectonic breccia: Cooper, B. N., 17.

**VIRGINIA BEACH**

**Engineering geology**  
 Beach erosion control studies: U.S. Army, Corps of Engineers, shorelines, beach stabilization: Watts, G. M.  
**Petrology**  
 Beach sand: Alford, J. R.; Bershad, S. F.

**WARREN COUNTY**

**Petrology**  
 Front Royal area, mica peridotite dike: Young, R. S., 6.  
**Structural geology**  
 Fractures, Athens limestone, Riverton area: Shamin, V. E.

**WASHINGTON COUNTY**

**Economic geology**  
 Iron, magnetic hematite, origin, Riverside Mine: Cooper, B. N., 5.  
**Petrology**  
 Hematite, magnetic, genesis, Riverside Mine: Cooper, B. N., 5.  
**Stratigraphy**  
 Ordovician, Mascot dolomite, old channeled depression, Shortsville area: Harris, L. P.  
 Saltville Fault, new concept: Nelson, W. A., 3.  
 Saltville fault, drill hole data: Nelson, W. A., 9.

**WEATHERING**

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**Piedmont**  
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**Soils**  
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**WELLS AND DRILL HOLES**

**Accomack County**  
 Water wells, logs and records: Sinnott, A., 5, 6.  
 Water wells, lithologic logs: Sinnott, A., 9.  
**Arlington County**  
 Subsurface data: Darton, N. H., 1.  
**Coastal Plain**  
 Chesapeake Bay area, submerged river system, lithologic logs: Hack, J. T., 2.  
 York-James peninsula, water wells: Cederstrom, D. J., 2.  
**Fairfax County**  
 Subsurface data: Darton, N. H., 1.

**Northampton County**  
 Water wells, logs and records: Sinnott, A., 5, 6.

**Virginia**  
 Bridge sites: Meadors, G. S., 1, 2; Parrott, W. T., 3, 4, 7, 9, 14, 15.  
 Bridge sites, resistivity: Parrott, W. T., 17.  
 Petroleum and natural gas wells drilled prior to 1959: LeVan, D. C., 2.  
**Virginia, southwest**  
 Oil well logs: Huddle, J. W., 1.  
 Oil and gas, test, drilled before 1959: Huddle, J. W., 2.  
 Oil and gas, Upper, Mississippian: Welpolt, R. H., 2.

**WISE COUNTY**

**Economic geology**  
 Coal, preparation characteristics: Gray, T. E., 1.  
**Geochemistry**  
 Black shale, Big Stone Gap, trace element contents, Mississippian: Tourtelot, H. A.  
**Mineralogy**  
 Celestite, strontianite, East Stone Gap area: Pharr, R. F.  
**Petrology**  
 Critical Fork head, bentonite, Pennsylvanian: Nelson, B. W., 4.  
 Appalachian Basin, sandstone: Siever, R.

**WORMS**

*Tentaculites lowdoni*  
 Ordovician, Chepultepec limestone, Augusta County, Fisherville area: Fisher, D. W.

**WYTHE COUNTY**

**Economic geology**  
 Zinc, exploration, geochemical, Austinville area: Fulton, R. B., III.  
 Zinc, Austinville Basin: Brown, W. H., 1; Oder, C. R. L.  
**Geochemistry**  
 Metal contents of mine water, Austinville cf. Mineral: Brown, W. H., 2.  
**Geomorphology**  
 Caves, L. Y. Gardner: Lowry, J., 1.  
**Geophysical surveys**  
 Austinville area, electric, resistivity: McMurtry, H. V.  
 Austinville area, radioactivity, sulfide deposits: Keevil, N. B.

**Mineralogy**  
 Clay, limonite, Austinville area: Hole, G. L.  
 Gypsum, Dunford Cave: Dietrich, R. V., 15.

**Paleontology**  
 Brachiopoda, Shady Formation, Cambrian, Austinville area: Cooper, G. A., 2.  
 Mammalia, bones, L. Y. Gardner cave: Lowry, J., 1.  
**Stratigraphy**  
 Cambrian, Ordovician, Kent Window area: Marshall, F. C.  
**Structural geology**  
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 Kaolin deposits, Augusta County, Cold Spring: Caskie, R. Alden.

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## Paleontology

Yorktown Formation, Yorktown area:  
Palmer, K. E. H. V.

**ZINC**

## Albemarle County

Faber area, occurrence, genesis: Gian-  
nini, W. F., 3.

## Rockingham County

Timberville district, occurrences, genesis:  
Herbert, P., Jr., 1.

Timberville district, possibilities: Steph-  
enson, R. C.

Timberville district, stratigraphic and  
structural control: Green, J.

## Shenandoah County

Timberville area, occurrences, genesis:  
Herbert, P., Jr., 1.

## Valley and Ridge

Austinville and Timberville districts,  
genesis: Ohle, E. L.

## Virginia

Sulfide ores, occurrence, distribution:  
Young, R. S., 8.

## Wythe County

Austinville district: Brown, W. H., 1.

Austinville district, soil analysis as in-  
dicator: Fulton, R. B., III.

Austinville district, occurrence: Oder, C.  
R. L.

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## Virginia

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J. B., Jr., 5.